

***P.C.C Pavement
Research & Development***

Philosophy & Approach

This section performs and assists concrete related material testing, research investigation and failure analysis. We maintain and update the quality control/assurance of materials/products used in the field on construction projects. This section also provides expertise for sign structures, high mast towers, etc. and testing of products for maintenance. We serve as liaison for maintenance/construction projects, and provide technical support and guidance for construction field personnel related to concrete and steel applications, specifications, and maintenance products. This sections drive is in the helping and implementation of new guidelines, repair options, specifying of materials and appropriate solutions for problems.

The P.C.C. section maintains a proactive approach to study existing and new products, chemical formulations and advanced technology for physical and materials testing. The forensic nature of any investigation for this section is towards issues presented in the field which enables us to help improve the service to the traveling public.

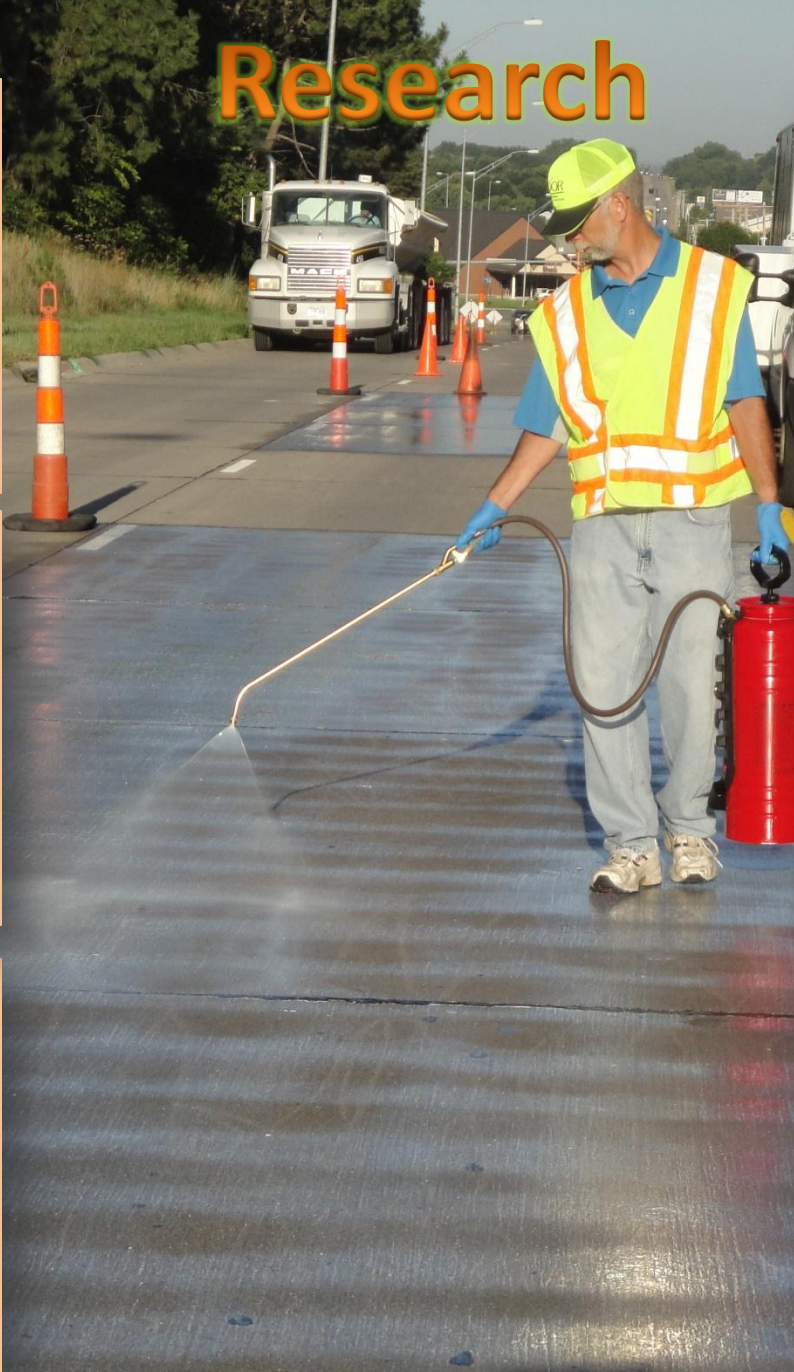
P.C.C Laboratory & Materials



Forensic Analysis



Research





SPECS

ENVELOPE MODEL

Concrete Wires (2' Span and 8'x16")

Wire	Length	Weight	Volume	Area	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter	Perimeter
1	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
5	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
11	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
13	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
14	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
15	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
17	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
18	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
19	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
21	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
22	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
23	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
25	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
26	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
27	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
29	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
30	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
31	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32	10.0	1.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

1) Data for this model was generated using the following assumptions:
 a) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 b) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 c) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 d) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 e) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 f) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 g) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 h) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 i) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 j) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 k) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 l) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 m) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 n) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 o) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 p) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 q) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 r) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 s) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 t) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 u) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 v) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 w) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 x) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 y) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 z) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 aa) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ab) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ac) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ad) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ae) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 af) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ag) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ah) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ai) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 aj) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ak) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 al) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 am) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 an) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ao) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ap) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 aq) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ar) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 as) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 at) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 au) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 av) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 aw) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ax) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ay) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 az) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ba) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bb) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bc) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bd) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 be) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bf) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bg) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bh) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bi) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bj) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bk) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bl) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bm) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bn) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bo) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bp) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bq) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 br) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bs) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bt) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bu) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bv) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bw) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bx) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 by) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 bz) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ca) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cb) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cc) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cd) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ce) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cf) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cg) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ch) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ci) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cj) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ck) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cl) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cm) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cn) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 co) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cp) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cq) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cr) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cs) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ct) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cu) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cv) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cw) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cx) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cy) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 cz) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 da) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 db) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dc) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dd) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 de) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 df) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dg) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dh) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 di) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dj) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dk) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dl) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dm) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dn) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 do) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dp) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dq) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dr) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ds) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dt) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 du) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dv) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dw) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dx) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dy) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 dz) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ea) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 eb) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ec) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ed) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ee) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ef) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 eg) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 eh) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ei) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ej) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ek) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 el) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 em) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 en) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 eo) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ep) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 eq) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 er) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 es) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 et) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 eu) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ev) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ew) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ex) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ey) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ez) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 fa) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 fb) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 fc) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 fd) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 fe) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 ff) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 fg) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 fh) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 fi) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 fj) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 fk) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 fl) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 fm) The concrete wires are assumed to be made of steel with a yield strength of 60,000 psi and a modulus of elasticity of 29,000,000 psi.
 fn) The

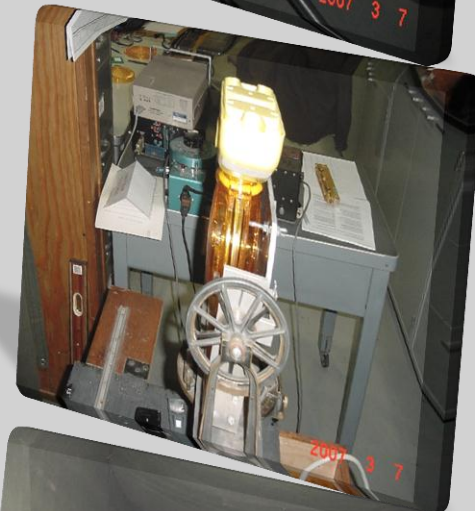


Physical Laboratory



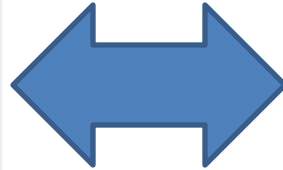
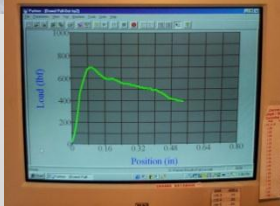
Physical Lab Field Work Inspection





1

Testing / Research



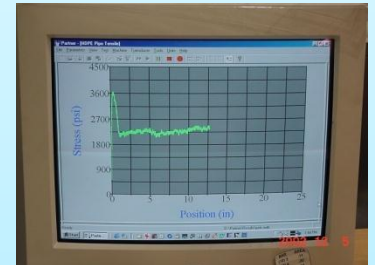
3

Development

Pipe



HDPE Pipe
Tensile



Policy

Concrete Pipe/
Flared End
Sections Policy





| Deicer Testing



| XRF Cement Chemical Analysis



| Chloride Ion Testing



| Samples for X-Ray Analysis



| Traffic Paint





Bridge Profilograph

Test, Equip. & Coring



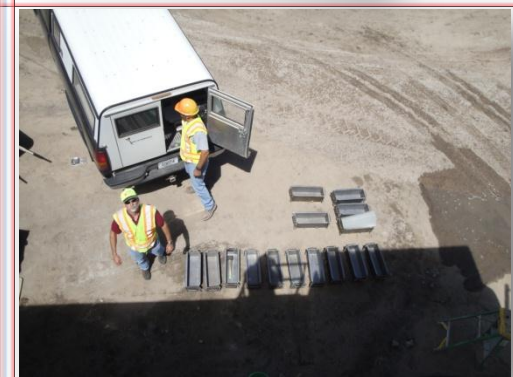
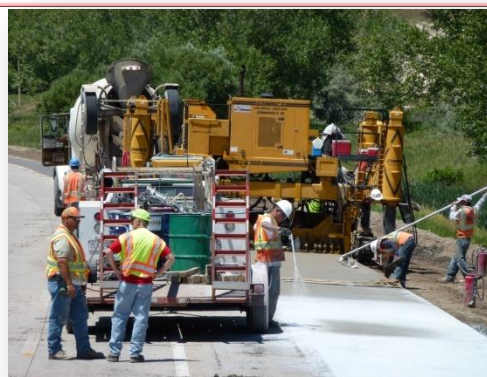


TEAM



WORK

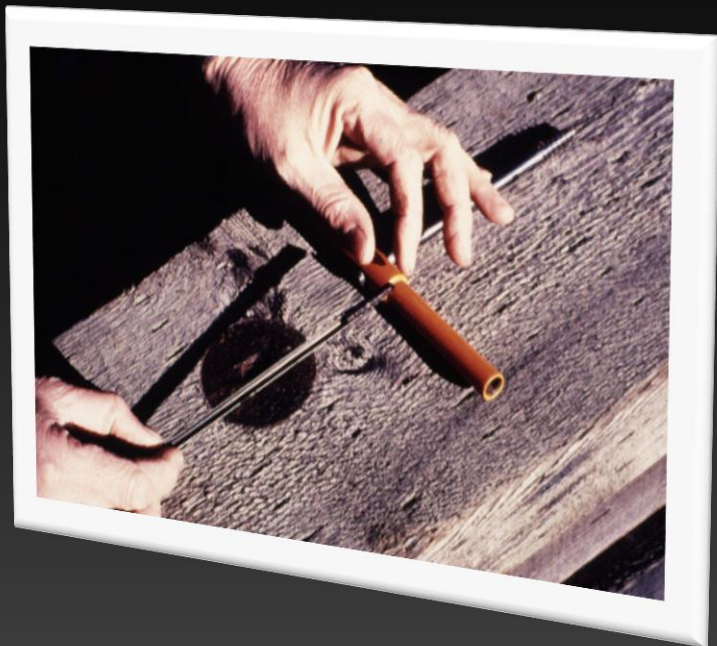














8 1:17 PM



